

# ANTIDEGRADATION OVERVIEW and Draft Process for WQSAC Discussion

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Services

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# TOPICS

- WQ Standards Framework
- 401 WQ Certification Process
- Federal Antidegradation Rule
- State Antidegradation Rule
- Issues for WQSAC discussion
  - Draft timeline

# WATER QUALITY STANDARDS

- Clean Water Act PL92-500, sections 303, 304
- 3 Essential elements
  - Designated Uses
  - Criteria to support the uses
  - **ANTIDEGRADATION POLICY**
- States are responsible for WQ standards
  - Must be consistent with EPA guidance
  - EPA can publish if a state doesn't

# APPLICABILITY

- Standards apply to the AMBIENT condition
- Standards can include criteria for:
  - Physical: e.g. turbidity, temperature
  - Chemical: “conventional” and “toxics”
  - Biological “balanced, integrated, and adaptive community...”
  - Tissue: e.g. Mercury in fish fillets
- Applicable to the AQUATIC ECOSYSTEM
  - Water column
  - Sediments Adjacent “Riparian Zone”
  - Aquatic and amphibious organisms
  - “Wildlife”: water-dependent organisms

# NH Standards

- RSA 485-A:8 and Env-Ws 1700
  - Antidegradation is Part Env-Ws 1708
- Designated Uses:
  - Aquatic life\*
  - Recreation\*
  - Drinking water supply
  - Fish consumption
  - Wildlife
- 2 classes: Class A and Class B

# Narrative Standards

- “Word description” of ambient condition that meets standards
  - e.g. Biological: “...a balanced, integrated, and adaptive community of organisms...”
- Need a “translator” or guidance document to convert the narrative word description to a quantitative measure

# WATER QUALITY ASSESSMENT

- Updated every 2 years next due 4/1/2006)
  - 305(b) Report / 303(d) List
  - Describes which waterbodies meet standards, and which are “impaired”
  - 303(d) list is the Official list of “impaired waterbodies”
  - Consolidated listing process new in 2002
- Assessment Process (new in 2002)
  - Waterbody Catalog
  - CALM
  - ADB

# WATERBODY CATALOG

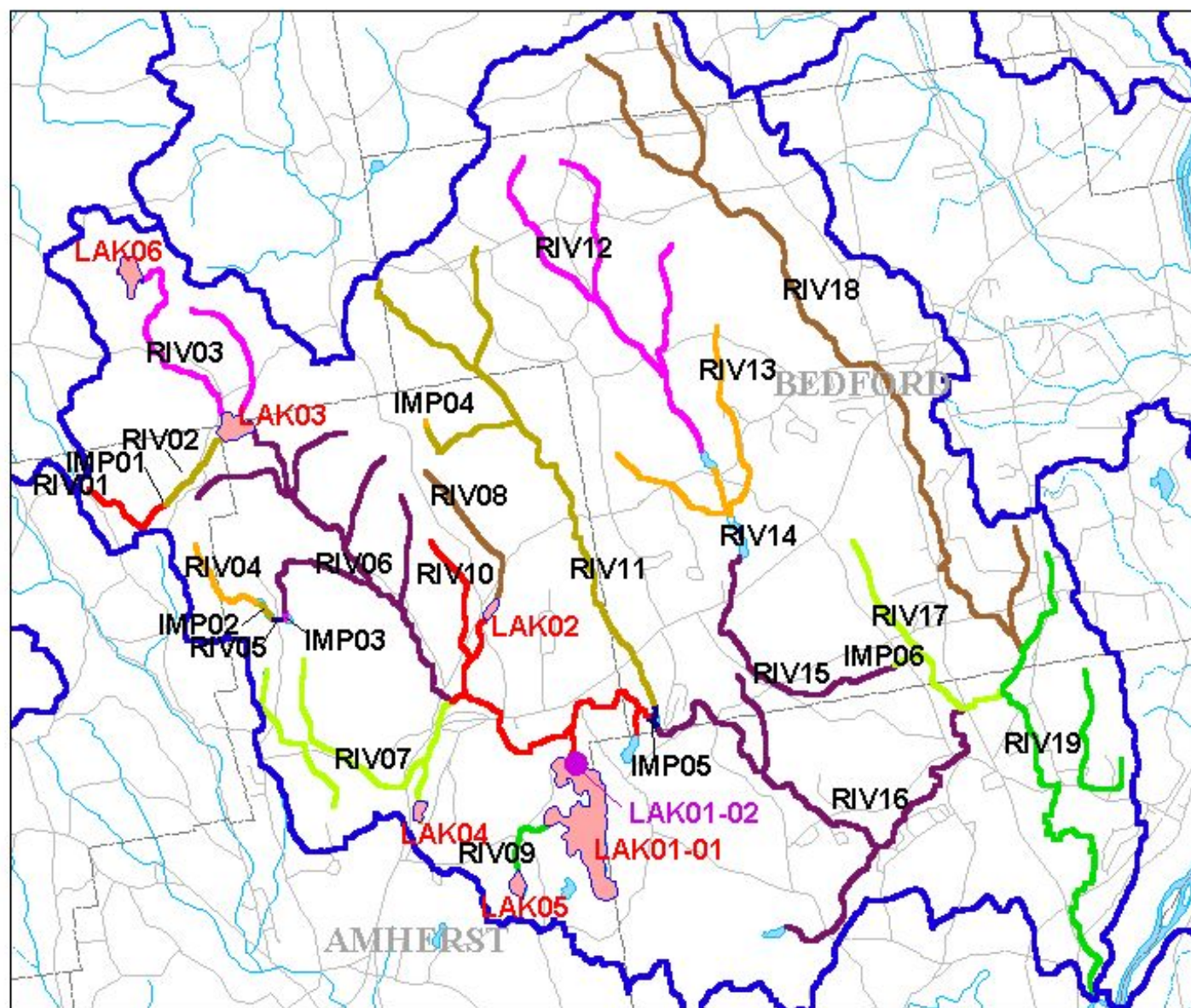
- All state surface waters
  - Divided into Assessment Units (~5100)
  - 6 Waterbody types
    - River
    - Lake
    - Impoundment
    - Wetland
    - Estuary
    - Ocean



# CALM

- Consolidated Assessment and Listing Methodology
- Quantitative Description of
  - Core parameters needed for assessment
  - Minimum data
  - Method of data analysis
  - For each designated use and waterbody type

## 2002 Assessment Units within HUC 010700060905



# ADB

- Oracle database from EPA
- Waterbody Catalog
  - Assessment status for each AU and DU
  - Possible status
    - Assessed – meets standards
    - Assessed – impaired
    - Insufficient information
    - Not Assessed

# 401 WQ CERTIFICATION

- Applies to all applicants for a federal license or permit that involves a discharge
  - Wetlands
  - FERC
  - NPDES
  - NPDES Small MS4 Phase II Stormwater General Permit
  - NPDES Construction General Permit
- State (DES) must certify that **construction and operation** will comply with WQS
- Requires **PREDICTION** of future WQ during construction and operation of the project

# 401 CERTIFICATION PROCESS

- NPDES – Wastewater Engineering issues certification in conjunction with permit
- Wetlands
  - SPGP: General certification with opportunity for modification for specific projects
  - COE 404 permits: Individual certification
- FERC: Individual certification
- NPDES Construction General Permit
  - New process with General Certification
  - Working on process for modification for specific projects
- Antidegradation Review can (should) be included in the 401 Certification

# AND NOW - ANTIDEGRADATION

- CFR title 40, Sec 131.12
- Env-Ws 1708 Antidegradation
- Three Tiers
  - TIER 1: Maintain existing uses
    - No review needed if WQS are met
  - TIER 2: High Quality Waters
    - Most NH AUs (probably)
    - High quality shall be maintained and protected unless there is social and economic justification
  - TIER 3: Outstanding Resource Waters
    - National Forest and Natural Segments of Designated Rivers
    - Quality shall be maintained and protected
    - Short term, temporary degradation allowed in specific cases

# ANTIDEG REVIEW PROCESS

- Applies to same applicants as 401 Certification – analogous process
  - DES proposes to incorporate it into 401 process
  - 401 rules are presently being revised
- TIER 2 is the focus
- Applied parameter by parameter
- Applied AU by AU
- Uses the CALM



# TIER 2 REVIEW

- 2 Categories: Significant and Insignificant
  - Social and economic justification for significant
  - Public participation for significant
  - No justification needed for insignificant
  - No public participation for insignificant
- Affected AUs should be identified and assessed
  - Current 401 practice is presumptive assessments
- Determination of high quality needed
  - No process now



# SIGNIFICANT vs INSIGNIFICANT

- Significant if  $\geq 20\%$  of remaining assimilative capacity would be utilized
- Insignificant if  $< 20\%$  of remaining assimilative capacity would be utilized

## UNLESS:

- DES decides it is significant based on a list of criteria

# CRITERIA FOR SIGNIFICANT

- Magnitude, duration, spatial extent
- Cumulative lowering of WQ over time
- Synergistic effects with existing activities
- Magnitude of mass load
- Toxic or bioaccumulative characteristics
- Sensitive biological resources
- Sensitive recreational or PWS uses
- Quality and value of the resource

# SOCIAL AND ECONOMIC JUSTIFICATION

- Structured Process – EPA Guidance Document
- NH has no experience

# PROPOSED WQSAC PROCESS

- Overview and general discussion: Sept and Oct
- 401 WQ Certification Rules: Oct and Nov
- TIER 2: Dec to ....
  1. High quality surface water quantitative determination
  2. Significant / Insignificant determination
  3. Assessing assimilative capacity
  4. 10% assimilative capacity reserve
  5. Economic and Social Justification
  6. Submittal of data / application procedures
- TIER 3

# CONTACT INFORMATION

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